

AMENDMENTS TO THE CLAIMS

1-90. (Canceled).

91. (Previously Presented) A method of applying a radial force against a surface of a passageway with an expandable device, comprising:

forming an expandable device with a plurality of cells expandable between a contracted state and an expanded state;

selecting the geometry of the cells such that the cells expand autonomously once expanded past a transition point; and

radially expanding the expandable device past the transition point and against a surface of the passageway.

92. (Previously Presented) The method as recited in claim 91, wherein forming comprises expanding the plurality of cells without axial shortening of the expandable device.

93. (Previously Presented) The method as recited in claim 91, wherein forming comprises forming the expandable device as a tubular member.

94. (Previously Presented) The method as recited in claim 91, wherein forming comprises forming the expandable device as a liner.

95. (Previously Presented) The method as recited in claim 91, wherein selecting comprises selecting a geometry that utilizes a combination of thick struts coupled to thin struts.

96-112. (Canceled)

113. (Previously Presented) A method of stabilizing an unsupported section of a passageway, comprising:

providing an expandable bistable device having a generally tubular shape that comprises a plurality of bistable cells, each of the bistable cells comprising first and second arcuate members;

placing the bistable device at a position in the passageway while in a first stable state; and

radially expanding the bistable device to a second stable state having a generally tubular configuration without substantially reducing axial length.

114. (Previously Presented) The method as recited in claim 113, further comprising attaching a wrapping to the outer surface of the bistable device.

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115. (Previously Presented) The method as recited in claim 114, wherein attaching comprises attaching an expandable material.

116. (Previously Presented) The method as recited in claim 113, further comprising applying a deformable material to the outer surface of the bistable device.

117. (Previously Presented) The method as recited in claim 116, wherein applying comprises applying an elastomeric material.

118. (Previously Presented) The method as recited in claim 113, wherein radially expanding comprises expanding the bistable device to a plurality of final diameters.

119. (Previously Presented) A method for installing a liner within a tubular passageway, comprising:

forming an expandable bistable device with a plurality of bistable cells, each of the bistable cells comprising first and second arcuate members, the expandable bistable device having a generally tubular shape;

surrounding the expandable bistable device with an expandable liner element attached to an outer surface of the bistable device;

placing the expandable bistable device at a position within the tubular passageway while in a first stable state; and

expanding the expandable bistable device into a second stable state to hold the liner element against an inner diameter of the tubular passageway.

120. (Previously Presented) The method as recited in claim 119, further comprising locating multiple bistable devices in the passageway such that the ends of the adjacent bistable devices overlap and form a continuation of the liner element against the inner diameter of the tubular passageway.

121. (Previously Presented) The method as recited in claim 119, further comprising creating each bistable cell so that the first arcuate member comprises a thin strut and the second arcuate member is a thick strut.

122. (Previously Presented) A method of isolating a portion of a passageway, comprising:

inserting within the passageway an expandable bistable device having a generally tubular shape formed by a plurality of bistable cells that permit the expandable bistable

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device to be selectively actuated between a contracted state and an expanded state, each of the bistable cells comprising first and second arcuate members; and

deploying the expandable bistable device to the expanded state to isolate a portion of the passageway.

123-126. (Canceled)

127. (New) The method as recited in claim 122, wherein the first and second arcuate members comprises a wave shape in the contracted state.

128. (New) The method as recited in claim 122, wherein the step of deploying occurs without axial shortening of the expandable bistable device.

129. (New) The method as recited in claim 122, wherein the first arcuate member is more flexible than the second arcuate member.

130. (New) A method of expanding an expandable device in a passage way, comprising:

providing an expandable device comprising a plurality of first and second arcuate members, the second arcuate members being more pliable than the first arcuate members;

positioning the expandable device in a passage way; and

transitioning at least some of the second arcuate members from a first stable position to a second stable position, wherein the step of transitioning expands the expandable device proximate to a surface of the passage way.

131. (New) The method as recited in claim 130, wherein each of the second arcuate members comprise a wave shape in the first stable position.

132. (New) The method as recited in Claim 130, wherein the step of transitioning comprises expanding the expandable device radially outward.

133. (New) The method as recited in Claim 130, wherein the expandable device is a medical device.